

Title (en)
COMPACT DESICCANT COOLING SYSTEM

Title (de)
KOMPAKTES TROCKENMITTELKÜHLSYSTEM

Title (fr)
SYSTÈME DE REFROIDISSEMENT À PRODUIT DÉSHYDRATANT COMPACT

Publication
EP 2928580 A4 20160706 (EN)

Application
EP 13860665 A 20131205

Priority
• AU 2012905293 A 20121205
• AU 2013001413 W 20131205

Abstract (en)
[origin: WO2014085860A1] A solid desiccant cooling system comprising a common intake delivering air (19) to a first pathway (21) for air to be conditioned, and a second pathway (31) for regeneration air and structure (24) retaining a mass of solid desiccant for cyclic movement between a first location (24a), in which the solid desiccant lies in the first pathway (21) for dehumidifying the air to be cooled by adsorption of moisture to the desiccant, and a second location (24b) in which the solid desiccant lies in the second pathway (31) for the regeneration air to take up moisture therein as water vapour. The second pathway has an air heater arrangement (35) upstream of the second location (24b) for heating the regeneration air and the first pathway (21) has an air cooler arrangement (25) independent of the air heater arrangement (35) downstream of the first location (24a). An air delivery device (40) is coupled to both of the first and second pathways (21, 31) and adapted or configured to deliver pressurised air along both the first and second pathways (21, 31). A control strategy is also provided to change the flow path of air from the common intake based on the need to satisfy alternative heating or cooling needs at different times of the day and season.

IPC 8 full level
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CPC (source: EP US)
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B01D 53/06 (2013.01 - EP US); **F24F 2003/1464** (2013.01 - US)

Citation (search report)
• [XYI] JP 2006248360 A 20060921 - MAZDA MOTOR
• [Y] JP 2004008914 A 20040115 - MATSUSHITA ELECTRIC IND CO LTD
• See references of WO 2014085860A1

Cited by
CN106322579A

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